

# Tackling Vexing Land Use Challenges: How Geodesign Brings GIScience to Life

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## Abstract:

What distinguishes geodesign from processes that deploy more innovative approaches to GIS? For example, GIS has been used to aid in making better decisions about siting and location. Is this geodesign? Possibly, but it depends on whether design-thinking was part in the decision making process. The term geodesign is new enough, and evolving fast enough, that it calls into question which approaches should actually merit use of the term “geodesign.” To answer the question “What is geodesign?,” this presentation establishes that the second part of the term, namely: design, must be present for a process to be truly representative of geodesign. The case to be made will be reinforced through showcasing actual projects, from around the world, that find success through deploying geodesign at a variety of scales and for critical topics, such as urban infill, coastal resiliency, infrastructure siting and environmental conservation. These examples make evident the key role that GIScience has in the success of geodesign.

Geodesign is a tried and trusted form of planning now updated through embracing the latest in GIS, visualization, and social science, all of which are organized around a unique framework process. What empowers geodesign’s mode of practice? It is an innovative combination of GIScience and design that deploys the latest technology and community engagement tactics. Geodesign is a new model for land design and planning which, interestingly, is rooted in decades of research and practice. The “new” aspect is the effective use of dynamic technology and the recognition of human capital potential.

Keywords: Geodesign, GIS, GIScience, Planning, Sustainable development

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